

#### **National Science Foundation**

### Intergovernmental Personnel Act Vacancy

# DIRECTORATE FOR ENGINEERING DIVISION OF DESIGN, MANUFACTURE AND INDUSTRIAL INNOVATION ARLINGTON, VA 22230

ANNOUNCEMENT NUMBER: E20030008-IPAs OPEN: 10/28/2002 CLOSE: Until Filled

## THIS POSITION WILL BE FILLED UNDER THE TERMS OF THE INTERGOVERNMENTAL PERSONNEL ACT (IPA)

The National Science Foundation (NSF) is seeking qualified candidates to fill several positions within the Division of Design, Manufacture and Industrial Innovation (DMII). DMII supports research that can lead to improved competitiveness of the manufacturing and service sectors, thus increasing their rate of innovation and responsiveness to changing national needs. Specifically, the Division supports fundamental academic research in design, manufacturing and industrial engineering, including programs in Engineering Design, Operations Research, Manufacturing Enterprise Systems, Service Enterprise Engineering, Manufacturing Machines and Equipment, Materials Processing and Manufacturing, and Nanomanufacturing. DMII also has a leading role in the crosscutting Grant Opportunities for Academic Liaison with Industry, Small Business Industrial Innovation, and Small Business Technical Transfer programs, and shares responsibility for the program in Innovation and Organizational Change.

Within the *Manufacturing Process and Equipment Systems Cluster*, Program Directors will be responsible for one or more of the DMII academic programs in manufacturing, currently Manufacturing Machines and Equipment, Materials Processing and Manufacturing, and Nanomanufacturing, with specific assignments determined among the three Program Director's in the area on the basis of background and needs. These programs support research that will advance our understanding of the manufacturing processes, machine tools, and systems within the broad scope of unit manufacturing processes, and bring about manufacturing innovations that impact economy and society. The emphasis is on research employing a blend of analytical, computational, and experimental efforts to address three key research issues, namely predictability, producibility, and productivity.

Within the *Engineering Decision Systems Cluster*, Program Directors will be responsible for one or more of the DMII academic programs in industrial engineering, currently Operations Research (OR), Manufacturing Enterprise Systems (MES), and Service Enterprise Engineering (SEE), with specific assignments determined among the two Program Director's in the area on the basis of background and needs. These programs provide funding for fundamental research on theory and methods that guide and support decisions about the design and operation of enterprise systems that is founded in mathematics, statistics, decision sciences, economics and information technology. OR is concerned with generic tools for modeling, analysis and optimization, while MES and SEE support more focused research on design, planning and control of manufacturing and service sector enterprises respectively.

Initial assignments under the IPA mechanism may be made for a period of one to two years, and may be extended for a third year. Individuals eligible for an IPA assignment include employees of State and local government agencies, institutions of higher education, Indian tribal governments, federally funded research and development centers and qualified non-profit organizations involved in public management in instances where such assignments would be of mutual benefit to the organizations involved. The individual remains an employee of the home institution and cost-sharing arrangements are generally negotiated between NSF and the home institution.

**STATEMENT OF DUTIES**: Program Directors will be responsible for the planning and administration of the program within the framework of the legislation, agency policies, missions, objectives and resources.

- Managing program resources so as to provide optimal appropriate scientific judgment to insure integrity and consistency in the grant/declination process without conflicts-of-interests, and with balance among appropriate sub-fields and institutions, and participation of all qualified applicants. Incorporating cross-directorate responsibilities into program administration.
- Managing an effective, timely merit review process, with attention to increasing the size and quality
  of the reviewer pools and insuring participation by women, minorities, and disabled scientists.
   Responsibilities are complex and wide-ranging, due to the multidisciplinary scientific efforts required.
- Representing the programs, Division and Foundation, within the scientific community, with other NSF Divisions, other agencies and organizations, and the public, accurately reflecting NSF policy and positions.
- Pursuing and/or being responsive to assignment on special projects and temporary functional teams from across the Foundation to solve problems, improve staff communication, and effect coordination for special programs.
- Formulating and managing the implementation of special solicitations and other ventures to redirect programs toward emerging frontier topics.
- Preparing and disseminating a variety of informational documents which may include data on progress being made toward NSF's goals, trends and opportunities papers, and budget plans.

**QUALIFICATIONS REQUIRED:** Applicants must have a Ph.D. or equivalent experience in engineering plus six or more years of successful research, research administration, and/or managerial experience demonstrating disciplinary expertise and strong collaborative integration skills within the broad context of manufacturing.

**HOW TO APPLY:** Individuals interested in an IPA assignment should submit a curriculum vitae or resume, and a publication list to the National Science Foundation, Division of Human Resource Management, 4201 Wilson Boulevard, Arlington, VA 22230, Attn: E20030008-IPAs. In addition you are asked to complete and submit the attached Applicant Survey form. Submission of this form is voluntary and will not affect your application for employment. The information is used for statistical purposes only. Telephone inquiries may be referred to Maria Sutton at (703) 292-4364. Hearing impaired individuals may call TDD (703) 292-8044.

The National Science Foundation provides reasonable accommodations to applicants with disabilities on a case-by-case basis. If you need a reasonable accommodation for any part of the application and hiring process, please notify the point of contact listed on this vacancy announcement.

NSF IS AN EQUAL OPPORTUNITY EMPLOYER COMMITTED TO EMPLOYING A HIGHLY QUALIFIED STAFF THAT REFLECTS THE DIVERSITY OF OUR NATION.

## NATIONAL SCIENCE FOUNDATION

NATIONAL SCIENCE FOUNDATION APPLICANT SURVEY		OMB No. 3145-0096 Expiration: 7/31/2005
Vacancy Ann. #: Position Status (temp	orary/permanent):	
Position Title/Series/Grade:		_
Your completion of this form will be appreciated. Submission of this Informa application. The data collected will be used only for statistical purposes to ensur Pursuant to 5 CFR 1320.5(b), an agency may not conduct or sponsor, and a displays a valid OMB control number. The OMB control number for this colle about 3 minutes to complete this survey, including time to read the instructions aspect of this survey, including suggestions for reducing this burden. If so Administrative Services, NSF, 4201 Wilson Blvd., Arlington, VA. 22230.	ation is voluntary and it will have no effect that agency personnel practices meet the person is not required to respond to an inaction is 3145-0096. NSF estimates that is. You may have comments regarding this	e requirements of Federal law. nformation collection unless it each respondent should take burden estimate or any other
PRIVACY ACT INFORMATION GENERAL - This information is provided pursuant to Public Law 93-579 (Priva records and forms that solicit personal information. AUTHORITY - Section 7201 of title 5 of the U.S. Code and Section 2000e-16 of		ndividuals completing Federal
PURPOSE AND ROUTINE USES  The information is used for research and for a Federal Equal Opportunity Recru meet the requirements of Federal law. Address questions concerning this forn Arlington, VA 22230.		
1. Today's Date:2. Ye	ar of Birth:	
<ol> <li>How did you learn about the particular position for which you are app 01 - Newspaper (specify)</li></ol>	10 - Federal, State or local job i 11 - State vocational rehabilitati Veterans Administration 12 - State employment office 13 - School or college counselo 14 - Private job Information service 15 - Private employment service 16 - Friend or relative working a 17 - Friend or relative not workin 18 - NSF website 19 - Internet or other website 20 - Other (specify)	on agency or r or other official vice e tt NSF ng at NSF
<ol> <li>B. Not Hispanic or Latino.</li> <li>Select one or more racial category with which you most close A. American Indian or Alaska Native. A person having on America (including Central America), and who maintains trile B. Asian. A person having origins in any of the original ped subcontinent including, for example, Cambodia, China, Indialslands, Thailand, and Vietnam.</li> <li>C. Black or African American. A person having origins in D. Native Hawaiian or Other Pacific Islander. A person having origins in Guam, Samoa, or other Pacific Islands.</li> <li>E. White. A person having origins in any of the original ped</li> </ol>	rigins in any of the original peoples bal affiliation or community attachroples of the Far East, Southeast Aa, Japan, Korea, Malaysia, Pakistany of the black racial groups of Anaving origins in any of the original	ment. sia, or the Indian an, the Philippine Africa. I peoples of Hawaii,
6. Sex (Circle the appropriate letter.) F - Female M - Male		
7. Please provide Information on your disability status by circling the a	appropriate category below:	
1. I do not have a disability; 2. Hearing impairment; 3. Vision impairm 6. Complete paralysis; 7. Convulsive disorder; 8. Mental retardation; and/or spine; 11.I have a disability but it is not listed.		
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Agency Code:\_